

Gall Bladder Wall Edema is Not Pathogenic of Dengue Infection

We have previously reported gall bladder wall edema (GBWE) in serology-proven pediatric dengue hemorrhagic fever (DHF).¹ Contemporaneously, Setiwan, *et al.*² reported GBWE in 94 out of 148 serologically-proven dengue cases. However is GBWE pathognomic of dengue? This study was undertaken to answer the question. We looked for GBWE and dengue serology in all children admitted with a fever of 100°F for 5 days or more, during a dengue epidemic, 2 years after our original study.

The study was conducted in a tertiary care referral center in North India. All children with a fever of 101°F for 5 days or more, admitted from September 2000 to January 2001, were included in the study. All had dengue serology and ultrasonography of the abdomen for GBWE. They also had blood counts, blood smear examinations, blood culture, Widal test and urine examination to look for the cause of fever. Dengue serology was tested at the National Institute of Communicable Disease, Delhi. IgM hemagglutination antibody titers greater than 1:160 was interpreted as a positive result. Gall bladder wall edema was defined as wall thickening greater than 3 mm on ultrasonography.³

The study population was divided into two groups

according to dengue serology positivity. Each group was further subdivided according to the presence of GBWE. The specificity and sensitivity of GBWE in dengue fever was looked at.

There were 56 children fulfilling the study entry criteria. Dengue serology was positive in five cases, four of them had GBWE. In all, GBWE was present in 25 of 56 children recruited for the study (Fig. 1). Specificity and sensitivity of GBWE in dengue infection was 58 and 80 per cent, respectively.

Out of the 56 children recruited, enteric fever was responsible for fever in 36. GBWE was present in 12 of these 36 cases of enteric fever. GBWE was seen in conditions as diverse as cerebral malaria, Fanconi anemia, viral fever with shock, sepsis with disseminated intravascular hemolysis and shock, sepsis with meningoencephalitis, urinary tract infection and pyrexia of unknown origin.

It was felt that GBWE could be an indicator of dengue¹ and this was supported by the study of Setiwan, *et al.*^{2,3} In the light of the results in the present study, GBWE appears to be too non-specific to be of help in the primary diagnosis of dengue infection. GBWE is present in a large number of conditions as part of polyserositis and it cannot be used as a diagnostic criteria for dengue fever.

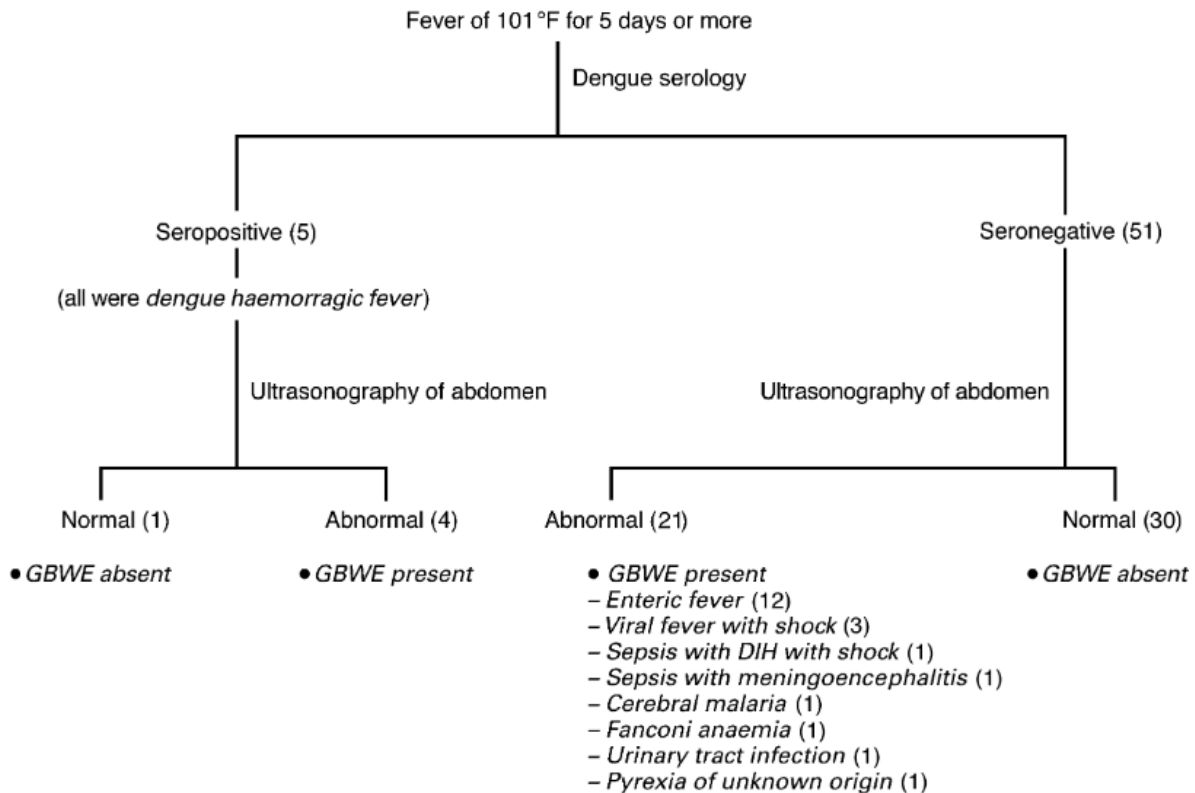


FIG. 1. Distribution of gallbladder wall edema in children with a fever of 101°F for 5 days or more.

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Sexually Transmitted Diseases in Children, a Cause for Concern

A 12-year retrospective study was carried out to determine the disease pattern and the reasons why children were seen at the Special Treatment Clinic (STC) of the Ahmadu Bello University Teaching Hospital, Zaria, Nigeria.

Relevant data, which included the year of presentation, age, sex, clinical presentation, laboratory findings and the social history of patients where available, was obtained from the case notes of patients aged 0–13 years that attended the clinic from 1985 to 1997.

Within the 12-year period, a total of 102 children were seen at the STC; 71.6 per cent (73/102) were females while 28.4 per cent (29/102) were males. Most of the children treated at the clinic were in the age range > 3 years – 7 years (32.3 per cent). A total of 52 children were treated at the instance of their parents noticing a problem while a few of the older children complained of symptoms related to genital infection. A total of 68 (66.7 per cent) of the children were diagnosed as having gonorrhoea, 72.0 per cent (49/68) of which were females. The majority of the girls were in the 1–7 years age group.

Candidiasis in 12/102 (11.8 per cent) was the next most prevalent infection and occurred only in females. It was not restricted to any age group in particular, although there was associated gonococcal infection in six cases, and one had genital warts.

Two female children developed vulvo-vaginitis as a result of introduced foreign bodies, one of which was a piece of bread and the other, tissue paper pushed in by the care-giver.

Five young girls aged between 4 and 11 years were victims of rape, one of which was a case of incest by a young uncle living in the same house. All five girls had gonococcal infection.

A total of five of the 13-year-old males admitted to having had sex (three with casual partners, while two

2. Setiwan M, Tatang KS, Wular H, Sugianto D, Thomas NP. Dengue hemorrhagic fever: ultrasound as an aid to predict the severity of the disease. *Pediatr Radiol* 1998; 28: 1–4.
3. Setiwan MW, Tatang KS, Thomas NP, Sugianto D, Wular H. Gall bladder wall thickening in dengue haemorrhagic fever: An ultrasonographic study. *J Clin Ultrasound* 1995; 23: 357–62.

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had visited commercial sex workers). All five had gonococcal urethritis. The only patient with lymphogranuloma venereum was a 13-year-old male. Another 13-year-old male who had raped a 3.5-year-old girl was also found to have gonorrhoea. Genital warts were diagnosed in seven of the children (all females), four of whom had condylomata acuminata.

The results of the study have clearly shown that sexually transmitted diseases in children is a real problem. Early detection and treatment depends on parents/guardians being observant and sensitive to the sexual health of their children/wards. Extra caution should be exercised in leaving children with care-givers especially of the opposite sex, even if they are relatives.

Proper counselling and psychological care should be available to sexually abused children to prevent them being marred for life. The society owes a duty to our children, to hold in high esteem moral and religious practices that will ensure that children do not become sexually active at an age when they are unable to make right and proper sexual decisions.

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